OPERATOR'S MANUAL

DieHard

Jump Starter/DC Power Source

Model No. 200.71990



CAUTION:

Read all Safety Rules and Operating Instructions, and follow them with each use of this product.

Sears, Roebuck and Co., Hoffman Estates, IL 60179 U.S.A.

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DieHard One Year Full Warranty

When operated and maintained according to all supplied instructions, if this DieHard product fails due to a defect in material or workmanship within one year from the date of purchase, return it to any Sears store or other DieHard outlet in the United States for free replacement.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Sears, Roebuck and Co., Hoffman Estates, IL 60179

FOR CUSTOMER ASSISTANCE OR REPLACEMENT PARTS, CALL TOLL-FREE FROM 7 AM TO 5:00 PM CT MONDAY THROUGH FRIDAY: 1-800-SEARS-64 (1-800-732-7764)



CONTAINS SEALED NON-SPILLABLE LEAD-ACID BATTERY. MUST BE DISPOSED OF PROPERLY.

WARNING: Possible explosion hazard. Contact with battery acid may cause severe burns and blindness. Keep out of reach of children.

IMPORTANT: CHARGE IMMEDIATELY AFTER PURCHASE

IMPORTANT: READ AND SAVE THIS SAFETY AND INSTRUCTION MANUAL.

1. IMPORTANT SAFETY INSTRUCTIONS

- **1.1** Charge the internal battery immediately upon purchase, every 30 days and after every use.
- **1.2** Use in a well ventilated space.
- 1.3 Contains a sealed, non-spillable lead-acid battery. Must be disposed of properly.
- **1.4** Someone should be within range of your voice or close enough to come to your aid when you are working near a lead-acid battery.
- 1.5 Have plenty of fresh water and soap nearby in case battery acid contacts your skin, clothing, or eyes. If acid enters the eye area, rinse with cold water for at least 10 minutes and get medical help immediately.
- **1.6** Do not smoke, or use matches or cigarette lighters, or allow any spark or flame near the battery or engine.
- 1.7 Never operate the power source unit if it has a damaged lead wire or clamps. Have the lead wire replaced by a qualified technician.
- 1.8 Wear complete eye and clothing protection when working with lead-acid batteries.
- **1.9** Do not permit the internal battery in the jump starter to freeze. Never charge a frozen battery.
- **1.10 WARNING:** Possible explosion hazard. Contact with battery acid may cause severe burns and blindness. Keep out of reach of children.
- 1.11 WARNING: Pursuant to California Proposition 65, this product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
- 1.12 WARNING: Failure to follow instructions may cause damage or an explosion. Read the entire instruction manual before use. Always shield your eyes during use and wear safety glasses.

2. JUMP STARTER/DC POWER SOURCE FEATURES



- 1. 12V DC Power Outlet
- 2. ON/OFF Power Switch
- 3. Digital Display
- 4. Display Select Push Button Switch
- 5. Replaceable Jaw Battery Clamps
- 6. Rubber Base
- 7. Internal Battery Charger Outlet (not shown)

3. JUMP-STARTING A VEHICLE

Warning: Failure to follow instructions may cause damage or an explosion. Read the entire instruction manual before use.

- **3.1** Turn the ignition OFF before making cable connections.
- 3.2 Use in a well-ventilated area.
- **3.3** Keep clear of fan blades, belts, pulleys and other parts that may cause injury.
- **3.4** Place the Jump Starter on a flat, stable surface near the vehicle battery and away from moving engine parts.
- 3.5 Make sure the rotary power switch on the front panel is in the O (OFF) position until clamps are connected to the vehicle battery. If plugged into a 110V AC wall outlet, disconnect.
- **3.6** To prevent sparking, NEVER allow clamps to touch together or to contact the same piece of metal.
- 3.7 Clamp the red clamp (+) to the positive terminal of the battery. (For a negative grounded system.)*
- 3.8 Clamp the black clamp (-) to an unpainted and unmoving part of the chassis or engine block. The 3-digit display will show the voltage of the battery. Do not connect the clamp to the carburetor, fuel lines, or sheet-metal body parts. Connect to a heavy gauge metal part of the frame or engine block.
- 3.9 If you have connected the clamps backwards, an audio alarm will sound. DO NOT turn your jump starter on. This could cause serious damage. Reverse the connections and the audio alarm will stop.

- 3.10 If no audio alarm sounds, turn the rotary switch to the 12V position. The clamps are now powered. Crank the engine. If the engine does not start within 5 8 seconds, stop cranking and wait at least 1 minute before attempting to start the vehicle again. (This permits the battery to cool down.)
- **3.11** After the engine starts, turn the rotary switch to the O (OFF) position. Then disconnect the black clamp (-) and then the red clamp (+) in that order. Store the clamps in the compartments located on the sides of the case.
- **3.12** Recharge the jump starter as soon as possible after use.

*NOTE: In the rare case of jump-starting a vehicle that has a positive-grounded vehicle electrical system, connect the NEGATIVE black clamp (-) to the negative terminal (-) of the vehicle battery. Then connect the POSITIVE red clamp (+) to an unpainted and unmoving part of the vehicle chassis or engine block. If you are unsure of the nature of the vehicle's electrical grounding system, check the owner's manual of the vehicle. To disconnect the clamps, reverse the order.

4. DIGITAL DISPLAY

The display can be used to indicate a battery's voltage when connected to a battery or the percentage of charge in the jump starter's internal battery.

With the switch in the O (OFF) position, connect the clamps to the vehicle's battery, and its voltage is displayed. Turn the jump starter's rotary switch to 12V, and the combination of both internal and external batteries are shown.

To read the internal battery's charge status: disconnect the clamps from the vehicle's battery, with the switch in the O (OFF) position, press the display button to read the percentage of charge left in the internal battery or turn the switch to the 12V position, and the voltage level of the internal battery is displayed. A fully charged battery will read 100% or 12.8 volts.

CHARGING OF INTERNAL BATTERY WITH BUILT-IN, 3-AMP CHARGER.

IMPORTANT:

- CHARGE IMMEDIATELY AFTER PURCHASE
- KEEP FULLY CHARGED.

This Jump Starter comes with a sealed, non-spillable DieHard maintenance-free lead-acid battery. This internal battery is specifically designed to deliver high power jump-starting as well as repetitive deep cycling performance.

After removing the jump starter from the package for the first time, charge it for a minimum of 8 hours before using.

To charge the Jump Starter internal battery:

5.1 Make sure the rotary power switch on the front panel is in the O (OFF) position.

- 5.2 Plug at least an 18 gauge (AWG) extension cord into the charger plug on the left side of the jump starter. (Extension cord not included; must be purchased separately.)
- **5.3** Plug the extension cord into a 120V AC electrical wall outlet.

CAUTION: Operating the Jump Starter while the internal battery is being charged may cause permanent damage to the unit.

5.4 Charging of the internal battery could take up to 48 hours due to the age and condition of the battery. At full charge, the charger will automatically drop into a float mode and maintain the battery at full charge without damaging the battery. The jump starter can be left plugged into the 120V wall outlet indefinitely to maintain full power.

NOTE: A fully charged battery will read 100%

5.5 Recharge the jump starter after every use and every month (30 days) to extend the battery life.

If the charger is plugged in for over 48 hours and the battery does not fully charge in this time, CHG ERR is shown on the Display. The batteries may be getting old and will no longer accept a charge.

6. POWERING A 12V DC DEVICE

This Jump Starter is a power source for all 12 volt DC accessories that are equipped with a 12V accessory plug. The DC accessory outlet has a 15-amp automatic overload protection circuit breaker. The breaker will automatically reset after an overload occurs.

6.1 To Operate a 12V DC Device:

- Open the protective cover of the DC power outlet on the front panel of the Jump Starter.
- Plug the 12V DC device into the DC power outlet, and turn the 12V DC device "ON" (if required).
- If the 12V DC device draws more than 15A, the internal circuit breaker
 of the Jump Starter will stop powering the device. If this occurs, unplug
 the device and the circuit breaker will automatically reset after several
 seconds.
- The DC power outlet is wired directly to the internal battery. Extended operation of a 12V DC device may result in excessive battery drain. Recharge immediately after unplugging the device.

6.2 12V DC Electrical Device Example Run-Time Chart

Appliance Type	Estimated Power	Estimated Time*
Fluorescent Lights, Cellular Phones	4 Watts	50 Hours
Radios, Depth Finders, Fans	9 Watts	25 Hours
Camcorders, DVD Players, Spotlights	15 Watts	13 Hours
Electrical Tools, Bilge Pumps	24 Watts	7.3 Hours
Electric Coolers	48 Watts	4.5 Hours
Air Compressors, Car Vacuums	80 Watts	2 Hour

*NOTE: Estimated run-times. Actual time may vary. Times are based on the internal battery being new, fully charged and operating at room temperature.

7. SPECIFICATIONS

Internal Battery Type	DieHard Maintenance-Free AGM Lead Acid
Nominal Voltage	12V DC
Capacity	22Ah
DC Power Outlet (Max. Continuous Load)	15A
Jumper Cables	4-Gauge 50 Inches Long
Battery Clamps	Replaceable Jaw
Dimensions (H x W x D)	16" x 14" x 5"
Weight	22 lbs.

8. TO ORDER AND REPLACE JAWS

Part Number: 2299001580

Description: Kit, Battery Clamp Rebuild

QTY Per Clamp: 1

8.1 Battery Clamp Jaw Replacement

- Secure the clamp in an open position using a vise or equivalent clamping device. IMPORTANT: Make sure the rotary switch on the front panel is in the O (OFF) position and the jump starter is not plugged into a 120V AC electrical wall outlet.
- Unscrew the fastener securing the cables to the rear of the top jaw.
- Unscrew the fasteners (2) securing the Copper Jaws to the plastic clamp. Remove the jaws and braided cable.
- · Reverse for assembly.

9. STORAGE AND MAINTENANCE

IMPORTANT:

- CHARGE IMMEDIATELY AFTER PURCHASE
- KEEP FULLY CHARGED.

Charge the internal battery immediately upon purchase, every 30 days and after every use.

All batteries are affected by temperature. The ideal storage temperature is between 40 and 70 degrees Fahrenheit. The internal battery will gradually self-discharge (lose power) over time, especially in warm environments. Leaving the battery in a discharged state may result in permanent battery damage. To ensure satisfactory performance and avoid permanent damage, charge the internal battery every month.

When the jump starter is ON, the clamps are live and will produce arcing or sparking if they come in contact with each other. To prevent accidental arcing, always keep the clamps on the storage holders and the JUMP START ON/OFF switch in the O (OFF) position when not using it to jump start a vehicle.